

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ARIE HENDRIK FRANS VAN VLIET
and SEBASTIAN MARTINUS PETERS

MAILED

JAN 28 2005

U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Appeal No. 2004-1950
Application 09/352,612

HEARD: December 8, 2004

Before GARRIS, WARREN and WALTZ, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner finally rejecting claims 16 through 18 and refusing to allow claims 1 through 7, 13 through 15 and 19 through 23 as amended subsequent to the final rejection. Claims 9 through 12 are also of record and have been withdrawn from consideration by the examiner under 37 CFR § 1.142(b).¹

Claims 1, 4, 6 and 16 illustrate appellants' invention of a grid of drawn polymeric strips comprising at least two spatially separated bonding points or lines in at least one zone of overlap,

¹ Appellants take issue with the examiner's requirement for restriction (brief, pages 20-21). This matter is petitionable and thus, not before us. 37 CFR §§ 1.143 and 1.144 (2003). See *In re Watkinson*, 900 F.2d 230, 233, 14 USPQ2d 1407, 1409-10 (Fed. Cir. 1990); *In re Hengehold*, 440 F.2d 1395, 1404, 169 USPQ 473, 479 (CCPA 1971).

and are representative of the claims on appeal:

1. A grid comprising drawn polymeric strips in at least two different directions, with the strips being bonded together in at least one zone of overlap, wherein said at least one zone of overlap comprises at least two spatially separated bonding points or bonding lines.
4. A grid according to claim 1, wherein a width of the bonding points or lines is 5 mm or less.
6. A grid according to claim 1, wherein the bonding points or lines are welded by means of a laser.
16. A grid comprising drawn polymeric strips in at least two different directions, wherein the strips have a higher tensile strength in a lengthwise direction of the strips compared to a tensile strength in a width direction of the strips, wherein the strips are bonded together in at least one zone of overlap, wherein said at least one zone of overlap comprises at least two spatially separated bonding points or bonding lines, and wherein the grid has a strength about equal to the higher tensile strength in the lengthwise direction of the strips.

The references relied on by the examiner are:

Foglia et al. (Foglia)	3,560,291	Feb, 2, 1971
Romanek	4,265,954	May 5, 1981
Kobiella	4,483,438	Nov. 20, 1984
Hoechst	1,506,163	Dec. 15, 1967
(published FR Patent Application, France)		
Saito	1206522	Feb. 21, 1978
(Canadian Patent)		
Van Vliet et al. (Van Vliet)	2,162,686	Nov. 11, 1994
(published Canadian Patent Application)		

The examiner has rejected appealed claims 1 through 5, 7 and 13 through 19 under 35 U.S.C. § 103(a) as being unpatentable over Van Vliet in view of Kobiella, Romanek and Saito (answer, pages 5-9), and appealed claims 6 and 19 through 23 under 35 U.S.C. § 103(a) as being unpatentable over Van Vliet in view of Kobiella, Romanek and Saito as applied to claim 1 above, and further in view of Hoechst and Foglia (answer, pages 9-11).

Appellants group the appealed claims into four groups (brief, page 9). Thus, we decide this appeal based on appealed claims 1, 4, 6 and 16 as representative of the groupings of appealed claims and the two grounds of rejection. 37 CFR § 1.192(c)(7) (2003); *see also* 37 CFR § 41.37(c)(1)(vii) (effective September 13, 2004; 69 Fed. Reg. 49960 (August 12, 2004); 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)).

We affirm.

Rather than reiterate the respective positions advanced by the examiner and appellants, we refer to the answer and to the brief for a complete exposition thereof.

Opinion

We have carefully reviewed the record on this appeal and based thereon find ourselves in agreement with the supported positions advanced by the examiner in the answer that, *prima facie*, the claimed grids encompassed by appealed claims 1, 4, 6 and 16 would have been obvious over the combined teachings of Van Vliet and Kobiella and of Van Vliet, Kobiella and Foglia² to one of ordinary skill in this art at the time the claimed invention was made. Thus, we again consider the record as a whole with respect to these grounds of rejection in light of appellants' rebuttal arguments in the brief and reply brief. *See generally, In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

The difference between the claimed grids and the grids disclosed by Van Vliet is described by appellants as "Van Vliet fails to teach or suggest a zone of overlap in a grid with two intersecting strips having at least two spatially separated bonding points or lines" (brief, page 16). In this respect, appellants find that Van Vliet teaches that bonding occurs in the entire region of overlap (*id.*, pages 15-16; reply brief, page 2). Appellants submit, with respect to appealed claims 15 and 16, that although Kobiella teaches spatially separated bonding, the reference does not bridge the gap between the claimed invention and Van Vliet because it is directed to a single strap that is subjected to tensile loads only in the longitudinal direction and not in the longitudinal and transverse directions as in the claimed grids and those of Van Vliet, and thus, the bonded strap of Kobiella does not have the problem of splitting in the transverse direction under load which can rupture the strap, citing their specification at page 2, ll. 17-30 for support (brief, page 17). Appellants allege that Kobiella discloses at col. 6, ll. 8-11, that the bonding area of the single strap has "only 75% of the strength" of the strap, thus teaching away

² A discussion of Romanek, Saito and Hoechst is unnecessary to our decision. *See In re Jones*, 958 F.2d 347, 349, 21 USPQ2d 1941, 1942 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 1302-04, 190 USPQ 425, 426-28 (CCPA 1976).

from using the bonding of the reference in grids “to prevent early rupture,” citing their specification at page 6, ll. 22-27, “where it is pointed out that the prior art bonding of the entire zone of overlap (such as [the conventional prior art weld of Van Vliet in] Fig. 2 . . .), [sic] exhibits only a 15% loss in strength retention” (brief, page 17). Thus, appellants argue that “since entire bonding, such as in Van Vliet, has improved strength from that taught to be achievable by Kobiella, one would have been led against the combination” (*id.*). Appellants contend with respect to appealed claim 4 that the references do not teach the specified width of the bonding points or lines.

Appellants further submit that the references do not teach that “the grid has a strength about equal to the higher tensile strength in the lengthwise direction of the strips” as specified in appealed 16, alleging that appellants “have found that the strength of grids that are loaded in a direction perpendicular to three or more spatially separated and parallel bonding lines can be virtually equal to the sum of the strips strength in that direction,” citing page 3, lines 3-12, of their specification (brief, page 18). Appellants contend that “Kobiella teaches an inferior strength of its bonding and teaches against such spatial separation” (*id.*, page 19). Appellants further contend that a comparison of a grid of Van Vliet’s grid with a grid of the claimed invention as set forth at specification, page 6, ll. 8-27, and shown in a table at brief, page 19, would show that the grid of Van Vliet suffers a large strength loss of about 15% and “exhibits the problem of early rupture,” which problem is solved by appellants in the grids of appealed claims 1 and 16. (brief, page 19).

Appellants submit with respect to appealed claim 6 that Foglia does not teach the use of lasers to form spatially separated bonding points or lines (*id.*, page 20).

The examiner responds that appellants’ arguments with respect to strap rupture are unsupported by evidence, and appellants’ use of spatially separated bonding to address strap rupture is only a different reason to use such bonding than that of improving tensile strength taught by Kobiella (answer, page 12). The examiner further points out that “Kobiella discloses at least 75% (strap strength)” which reads on “75% and higher, with no upper limit provided,” and finds that “[o]ne of ordinary skill in the art . . . would have readily expected from Kobiella’s general teaching as provided in Col. 2, lines 21-46, the strength across a zone of overlap would

increase from its original strength by employing spatially separated bonding lines as such maintains orientation within the strips at the zone of overlap" (*id.*, pages 12-13). The examiner further finds that "[t]he exact extent of the strip strength in the welding zone would have been influenced by a variety of factors, including number of bonding lines, the spacing of bonding lines, and the polymeric material of the strip, all of which one of ordinary skill in the art would have readily appreciated as contributing factors" (*id.*, page 13). Thus, the examiner concludes that one of ordinary skill in the art would have been motivated by the teachings of Kobiella to employ the bonding thereof in the welds of Van Vliet in the reasonable expectation that "the orientation of the strips would be maintained and in turn the strength of the strips in the weld zone would increase" (*id.*).

The examiner points out with respect to appealed claim 4 that Kobiella teaches at col. 4, ll. 13-27, that the bond lines can be 2.5 mm in width (*id.*, page 14). With respect to the strength limitation of appealed claim 16, the examiner finds that Van Vliet forms mats with strips drawn to orient the molecules in the longitudinal direction and thus have high tensile strength in that direction, pointing out that the reference would have suggested at page 4, ll. 12-15, "that the mesh mats have almost the same strength as the sum of the strengths of the strips located in one direction" (*id.*). The examiner further finds that in Kobiella, the spatially separated bonding lines act to maintain the strength of the strip at the zone of overlap. With respect to appealed claim 6, the examiner points out that Foglia suggests that a "laser is a known means used to weld thermoplastic strips" (*id.*, pages 14-16).

Appellants reply that Van Vliet teaches bonding the entire zone of overlap in both single strip bonding and crossed strip bonding while Kobiella teaches only single strip bonding, and thus one of ordinary skill in the art would have been taught by the combination of references that the end of the single strip can be welded either across the entire zone of overlap or by separated bonding lines because Kobiella neither provides motivation for welding crossed strips or appreciates the problems of a grid (reply brief, pages 2-3). With respect to the strength limitations in appealed claim 16, appellants further argue that contrary to the findings of the examiner, Kobiella teaches acceptable strength welds of thin-film strips without "sacrificing an unacceptable amount of strap strength at the weld" at col. 3, l. 67, to col. 4, l. 4, which would

have taught that the “the bond is not strong, but rather marginally acceptable,” and thus would not have provided the reasonable expectation of success that one of ordinary skill in the art needs “to solve a technical problem” of early rupture (*id.*, pages 4-5). Appellants point out that the strip of Kobiella is wider and thinner than a conventional strap, and the reference “is directed to overcoming difficulties occurring in attempting to melt the entire surface areas of the overlapping wider and thinner strap portions,” citing col. 2, ll. 6-33, and thus, Kobiella teaches that separated bond lines increase the strength of an overlapped single strip (*id.*, pages 5-6). Thus, appellants argue that there was in Kobiella the objective to retain minimally sufficient tensile strength to assure proper functioning of a conventional strap in a tension loop, and so, there is no motivation to combine this reference with Van Vliet the bonding method of which shows superior strength to that of Kobiella (*id.*, page 6; see also pages 7-8).

We interpret appealed claims 1, 4, 6 and 16 by giving the terms thereof their broadest reasonable interpretation in light of the written description in appellants’ specification, including the drawing, as it would be interpreted by one of ordinary skill in this art, without reading into the claims any limitation or particular embodiment disclosed in the specification. *See In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); *In re Priest*, 582 F.2d 33, 37, 199 USPQ 11, 15 (CCPA 1978). It is well settled that applicants’ mere intent as to the scope of the claimed invention does not so limit the scope of a claim which is otherwise definite when construed in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Cormany*, 476 F.2d 998, 1000-02, 177 USPQ 450, 451-53 (CCPA 1973).

We find that the plain language of claim 1 specifies that a grid comprising at least biaxial drawn strips of *any* polymeric material of *any* dimensions, that are bonded in at least one overlap zone comprising at least two spatially separated bonding points or lines of any dimensions, without limitation on the manner in which the bonding is accomplished or the strength of the bond. Thus, the claimed grid encompassed by appealed claim 1 can comprise any manner of additional overlap zones bonded in any manner including fully bonded, and the specified at least one overlap zone can be otherwise fully bonded as long as the zone contains at least two spatially separated bonding points or lines of any dimensions, particularly in view of the transitional term

“comprising.” *See In re Baxter*, 656 F.2d 679, 686-87, 210 USPQ 795, 802-03 (CCPA 1981) (“As long as one of the monomers in the reaction is propylene, any other monomer may be present, because the term ‘comprises’ permits the *inclusion* of other steps, elements, or materials.”). Thus, a grid in which *one* zone of overlap is as specified in the claim and *all* of the other zones are fully bonded falls within claim 1.

Appealed claim 4, dependent on claim 1, specifies that *only* at least two bonding points or lines *only* in at least one zone of overlap must be any width less than 5 mm, however small. The claimed grids thus encompassed by appealed claim 4 has at least two spatially separate bonding points or lines of 5 mm or less in width in *one* of the zones of overlapping biaxial strips of any polymeric material and dimension, the remaining bonding points or lines in that zone being of any dimension, and all of the remaining zones of overlap of the grid can be of the same or different bonding construction, including zones in which all bonding points or lines exceed 5 mm in width and zones that are fully bonded. Appealed claim 6, dependent on claim 1, is drawn in product-by-process format, *see generally, In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985), and specifies that *only* the at least two bonding points or lines of the at least one zone of overlap must be welded by means of a laser, that is, by any method in which a laser is involved.³ The claimed grids encompassed by appealed claim 6 are those encompassed by appealed claim 1 that have the same properties as would be imparted by bonding by a laser.

Appealed claim 16 is similar in language to appealed claim 1 but includes the further limitations that tensile strength of the strap is higher in the lengthwise, that is, longitudinal, direction, than in the width, that is, transverse, direction, and the limitation that the grid must have “a strength about equal to the higher tensile strength in the lengthwise direction of the strips.” There is no limitation on the nature of the biaxial polymeric strips; the presence of any other materials in the grid, including reinforcing materials or other additive, permitted by the transitional term “comprising,” *see Baxter, supra*; the angle of the overlap of the strips and any

³ The language of appealed claim 6 recites sufficient structure, “a laser,” to perform the specified function, “bonding points or lines are welded,” such that the language does not come within the purview of § 112, sixth paragraph. *See Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1318, 50 USPQ2d 1161, 1166 (Fed. Cir. 1999).

other material; the location(s) and/or dimension(s) of the at least two spatially separated bonding points or lines within the at least one zone of overlap; the number of such zones of overlap; or any other feature which provide the “about equal” strengths of grid and strips. Indeed, there is no claim language which specifies that it is the bonding of the at least one zone of overlap, regardless of the bonding at any other overlap zone(s), which achieves the strength requirement that involves the tensile strength in the longitudinal direction of *all* of the strips in the grid .

Cf. specification, page 3, ll. 3-22.

We find that Van Vliet would have disclosed to one of ordinary skill in this art⁴ mats or grids made from overlapping drawn polymeric strips welded together at the zones of overlap, wherein the strips are of any polymeric material which have a longitudinal direction and a transverse direction, without regard to any dimensions, with the orientation of the molecular structure of the polymeric strip in the longitudinal direction (e.g., abstract; page 1, ll. 2-29; page 2, ll. 5-10; page 2, l. 32, to page 3, l. 8; page 3, ll. 33-40; page 5, ll. 9-20). The welding of the overlap zones is the result of electromagnetic heating of particles in one or both sides of one or more of the strips, of which there can be more than two. Indeed, Van Vliet would have disclosed to one of ordinary skill in this art that the strength of the welded overlap zones and of the mat or grid can be determined and controlled as desired by the type and drawing of the strips and the quantity and distribution of particles in the strips, such that the welded strips should “suffer the minimum loss of strength” (e.g., page 1, l. 33-34; page 2, ll. 10-18; page 3, l. 23, to page 4, l. 18; page 4, l. 31, to page 6, l. 20). In this respect, Van Vliet discloses that “[a]fter carrying out welding, these mesh mats have almost the same strength as the sum of the strengths of the strips or bands located in one direction,” which is the longitudinal direction (page 4, ll. 12-15). We find that Van Vliet also discloses plastic packing straps which “in use are welded together at their ends,” in which respect “it is important that the strength thereof is not weakened in the region of the weld” (e.g., page 3, ll. 4-22).

⁴ It is well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in this art would have reasonably been expected to draw therefrom, *see In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968), presuming skill on the part of this person. *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985).

We find that Kobiella would have disclosed to one of ordinary skill in this art that an unconventionally thin, wide strap of oriented, that is, drawn, polymers can be welded at its overlapping ends in a manner that results in a fused joint or weld that retains “a sufficient amount of tensile strength after formation of the joint to enable the strap to properly function in a tensioned loop” (col. 1, ll. 57-63; col. 2, ll. 33-40). In this respect, Kobiella acknowledges that in the prior art, “welded strap joints having a conventional configuration are difficult to employ satisfactorily with thin film wide strap,” and discloses that “[a]n attempt to produce a conventional weld in . . . [an oriented] film strap across the full width of the strap may result in reduced weld strength and can reduce strap strength at the weld since the strap orientation is destroyed in the fused region of the weld” (col. 2, ll. 6-20 and 21-32).

Kobiella teaches that “[t]he joint comprises a plurality of fused regions at the interface of the overlapping portions . . . [which] are spaced-apart across the width of the strap . . . [and in] the form of an interface layer of merged resolidified strap surface portions” (col. 2, ll. 49-56).

Kobiella discloses that

spaced-apart fused regions **30** results in acceptable strength welds of the oriented thin film strap without sacrificing an unacceptable amount of strap strength at the weld. Since the overlapping strap portions **21** and **22** are not welded or fused in the spaces between the fused regions **30**, the overlapping strap portions retain substantially all of their original strength in the unfused regions **40**. Further, since the fused regions **30** run parallel to the length of the strap **S**, the tension stress in the strap **S** can be taken without interruption along the entire length of the joint **J** in the adjacent non-welded (unfused) regions **40** of the strap **S**. [Col. 4, ll. 1-12, and FIGs. 2 and 3; see also col. 3, ll. 5-66.]

Kobiella teaches that the width of each fused regions **30** can be 2.5 mm; that narrow thin film straps can have less than eight fused regions **30**, and wider film straps can have more; and under certain conditions, the joint **J** can be formed in a manner to have “a strength of at least about 75% of the strap strength” (col. 4, ll. 16-17 and 28-36; col. 6, ll. 8-11). Kobiella does not teach that the sole method to prepare such welded joints is “friction-fusion,” although this method is preferred (e.g., col. 2, ll. 62-63, and col. 4, l. 46-47).

We compare the claimed invention encompassed by appealed claims 1, 4 and 16, as we have interpreted these claims above, with the combined teachings of Van Vliet and Kobiella that we found above, in light of the arguments submitted by appellants and by the examiner, and find

that contrary to appellants' position, the combined teachings of the reference would have reasonably suggested to one of ordinary skill in the art that the bonding or welding of the entire zone of overlap in thin film, oriented polymeric strips that can be used in mesh mats or grids as taught by Van Vliet, can be replaced with the spatially separated bonding lines or regions, of about 2.5 mm in width, for such strips as taught by Kobiella in the reasonable expectation of obtaining a mat or grid in which the strips retain substantially all of their original strength in the unbonded or unwelded regions in the zone of overlap in the longitudinal direction, and thus would have almost, that is, about, the same strength as the sum of the strengths of the strips or bands located in the longitudinal direction, which is all that these claims require. *See In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) ("The consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that [the claimed process] should be carried out and would have a reasonable likelihood of success viewed in light of the prior art. [Citations omitted] Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure."); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) ("The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art."); *see also In re O'Farrell*, 853 F.2d 894, 903-04, 7 USPQ2d 1673, 1680-81 (Fed. Cir. 1988) ("Obviousness does not require absolute predictability of success. . . . There is always at least a possibility of unexpected results, that would then provide an objective basis for showing the invention, although apparently obvious, was in law nonobvious. [Citations omitted.] For obviousness under § 103, all that is required is a reasonable expectation of success. [Citations omitted.]").

Indeed, Kobiella would have taught one of ordinary skill in the art that conventional bonding or welding across the full width of the overlapped portion in the longitudinal direction of the strip can result in reduced bond or weld strength and strip strength if the strip molecular orientation is affected in the fused region of the overlapped strip, and Van Vliet, disclosing full width bonding or welding for overlapped strips, as appellants correctly point out, acknowledges

that the molecular deorientation of the strip is known to be caused by bonding or welding and must be considered in constructing the mat or web (page 5, ll. 9-16). Kobiella would have further taught this person that a solution to this problem is a bond or weld that comprises a plurality of fused regions at the interface of the overlapping portion in the longitudinal direction of the strip, thus permitting the overlapping strap portion to retain substantially all of its original strength, thus providing the motivation to use such bonding or welding pattern in place of bonding or welding the entire zone of overlap in the mat or grid of Van Vliet.

We recognize that Kobiella does not address the problem of splitting of strips in the transverse direction under load as do appellants. However, Kobiella identifies a problem with single strip overlap bonding or welding of the entire overlap area shown by Van Vliet for double strip overlap bonding or welding, and thus one of ordinary skill in this art would have been directed to the solution disclosed by Kobiella which permits retaining strip strength in the longitudinal direction that is of importance to Van Vliet. Thus, as the examiner argues, “[a]s long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. [Citations omitted.]” *In re Beattie*, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); *see also In re Kemps*, 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996); *In re Dillon*, 919 F.2d 688, 693, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990)(*in banc*). In any event, one of ordinary skill in this art would have recognized from Van Vliet that the strength of the strip in the transverse direction can be addressed by the type and drawing of the polymeric material, and as pointed out by the examiner, there are a number of additional variables that also influence strip and grid strength.

We are not convinced by appellants’ arguments that Kobiella teaches inferior bonding strength which results in “only 75% of the strength of the strap” compared to only a 15% loss in strength that appellants find in Van Vliet (brief, pages 17 and 19). Indeed, appellants’ arguments in these respects are unsupported on the record as clear from the dissimilar materials and dimensions reported in the table at page 19 of the brief, and the disclosure of the example at col. 6, ll. 8 *et seq.*, of Kobiella has not been established as being representative of the teachings of the reference as a whole. In this latter respect, the examiner correctly points out that said

disclosure in Kobiella reads “at least about 75 percent of the strap strength” which, when compared with the disclosure “the overlapping strap portions retain substantially all of their original strength,” would define a range with 100 % retention as the upper limit. Thus, appellants’ arguments do not establish that the “strength” limitation of appealed claim 16 is not addressed by the combination of references, and there is no limitation with respect to the bond and/or strap strength in appealed claims 1, 4 and 6.

Appellants’ arguments based on the use in Kobiella of film strips that “are wider and thinner than a conventional strip” are not convincing because such strips are encompassed by the teachings of Van Vliet as well as by the appealed claims.

With respect to appealed claim 6, appellants do not support their bare argument that Foglia does not teach the use of lasers to form spatially separated bonding points or lines. Indeed, the reference teaches that overlapped polymeric films may be joined together with a focused laser beam which can be pulsed to form a succession of bonded areas (e.g., col. 1, ll. 44-60, and col. 6, ll. 8-13).

Accordingly, based on our consideration of the totality of the record before us, we have weighed the evidence of obviousness found in the combined teachings of Van Vliet, Kobiella, Romanek and Saito and of Van Vliet, Kobiella, Romanek, Saito, Hoechst and Foglia with appellants’ countervailing evidence of and argument for nonobviousness and conclude that the claimed invention encompassed by appealed claims 1 through 7 and 13 through 23 would have been obvious as a matter of law under 35 U.S.C. § 103(a).

The examiner’s decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (effective September 13, 2004; 69 Fed. Reg. 49960 (August 12, 2004); 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)).

AFFIRMED

Bradley R. Garris
BRADLEY R. GARRIS)
Administrative Patent Judge)

Charles F. Warren
CHARLES F. WARREN) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND
) INTERFERENCES

Thomas A. Waltz
THOMAS A. WALTZ)
Administrative Patent Judge)

Appeal No. 2004-1950
Application 09/352,612

Oliff & Berridge, PLC
PO Box 18828
Alexandria, VA 22320